UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,879	09/19/2001	Kelyn Anne Arora	8293R	1449

27752 7590 03/28/2003

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER
TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
1771	5

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-5

Office Action Summary	Application No.	Applicant(s)	
	09/955,879	ARORA ET AL.	
	Examiner	Art Unit	
	Norca L. Torres-Velazquez	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) *13-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-12, drawn to a nonwoven web, classified in class 442, subclass 361.

II. Claims 13-27, drawn to a method of making, classified in class 156, various subclasses.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the nonwoven web can be made without a stretching step.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Bart Hersko on March 19, 2003 a provisional election was made with traverse to prosecute the invention of group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. It is noted that the present application claims "A soft, fibrous material...". While there is no definition of what "soft" means or the degree of softness, if it is being quantified by some mean; for examination purposes the term "soft" is interpreted by Examiner as a desired characteristic in nonwoven webs used in applications described by Applicants such as bandaging materials, garments, disposable diapers and personal hygiene products, such as pre-moistened wipes. It is further noted that the term "soft" is in the preamble, therefore, no patentable weight is given to it.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 is dependent on claim 6, which is also dependent on claim 4. The bending rigidity of less than about 0.09 gcm^2/cm claimed in claim 7 is more than 0.013 gcm^2/cm as claimed in claim 6, therefore this limitation cannot depend on claims 6 or 4.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIRBY et al. (US 5,533,991) in view of BROCK et al. (US 4,041,203).

KIRBY et al. discloses a bodyside cover for an absorbent article that provides a soft and comfortable surface adjacent to the wearer's skin. (Column 1, lines 11-16)

The reference discloses a bicomponent cover 12 that is constructed of two different materials 26 and 30. The first material 26 contains a plurality of apertures 28 formed therethrough, it can be an extrusion-coated nonwoven or a net material that has opening between the strands or threads due because of its construction. (Column 5, lines 21-28)

The second material 30 of the bicomponent cover 12 is preferably a liquid-permeable nonwoven web. The nonwoven web can be a fibrous material formed from fusible polymeric fibers or filaments. The nonwoven web is nonperforated, although a perforated web can be used if desired. The reference teaches the use of polyolefins to form the nonwoven web. Suitable materials include polypropylene spunbond and bonded carded webs. An appropriate nonwoven web material should have a uniform web with a denier of about 1.5 or greater. The reference further teaches that the second material 30 can be bonded to the first material 26 by thermal bonding. (Column 7, lines 17-38)

The KIRBY et al. reference shows on data that indicates that significant differences in softness existed between the first and second materials. For all of the tests except the test for the second material, "Thickness Loss During Compression," a lower value was obtained indicating a softer material. For example, in the test for "Bending Rigidity", the 0.002 value for the second

material is much lower than the 0.028 value obtained for the first material. This means that the second material (the nonwoven) is less rigid than the first material (the thermoplastic film). For the "Thickness Loss During Compression" test, a higher value indicates a more compressible and, thereby, softer material. In Table 5, the 45.77 value for the second material is higher than the 13.17 value obtained for the first material, and therefore the second material is more compressible. (Column 10, lines 35-47).

The reference teaches that the second material could be a spunbond web, which by definition have the filaments bonded by methods such as hot-roll calendering and consolidation of a significant area is expected. (Refer Dictionary of Fiber & Textile Technology, 7th edition, page 184). However, the reference does not explicitly disclose that the nonwoven web has a consolidation are of at least about 30% or at least 40%.

BROCK et al. (US 4,041,203) discloses nonwoven fabrics for use in applications such as garments, wipes, and the like. (Column 1, lines 36-43) The reference teaches the use of bonding in their invention has a two-fold effect of achieving ply attachment between the mat and web and of integrating the continuous filament web into a coherent, strong constituent so that the resulting material has desirable strength characteristics. (Column 4, lines 43-48) It also teaches that the pattern of the raised points on the roll 44 is selected such that the area of the web occupied by the bonds after passage through the nip is about 5-50% of the surface area of the material with the discrete bonds being present in about 50-1000/in^2. (Column 4, lines 35-40)

BROCK et al. further discloses that the material exhibits surprisingly good abrasion resistance in that the surfaces do not tend to get fuzzy or raise a pile during use. With respect to the continuous filament web side, the abrasion resistance obtained is believed to be attributable

to the fact that the filaments are strongly held within the discrete bond areas without breakage thus avoiding the presence of long filament spans which would tend to "fuzz-up" during use. (Column 7, lines 50-58)

With regards to the claimed fuzz removal value, it is noted that both do not show test results providing the Examiner with values that would compare with

It is noted that KIRBY et al. is silent with respect to the claimed fuzz removal value. However, it is reasonable to presume that the claimed fuzz removal value is inherent to the invention of KIRBY et al. Support for said presumption is found in the use of the same starting materials (i.e. fibrous nonwoven web of thermoplastic materials), like processes of making the articles (i.e., thermal bonding), and the production of similar end-products (i.e., materials that provide a soft and comfortable surface adjacent to the wearer's skin). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the presently claimed function of "fuzziness" would obviously have been provided as a result of the inventive nonwoven web with 5-50% bonding area that has good abrasion resistance in that the surfaces do not tend to get fuzzy or raise pile during use of the BROCK et al. reference. *Note In re Best*, 195 USPQ 433.

Since both KIRBY et al. and BROCK et al. from the same field of endeavor, nonwoven fabrics with fabric-like characteristics, the purpose disclosed by BROCK et al. would have been recognized in the pertinent art of KIRBY et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven web and provide it with a bonding ("consolidation") area of 5-50% with the motivation of holding the filaments within the discrete

bond areas without breakage and avoiding "fuzz-up" during use as disclosed by BROCK et al. (Column 7, lines 50-58).

11. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIRBY et al. and BROCK et al as applied to claims 1-8 above, and further in view of SAYOVITZ et al. (US 6,093,665).

KIRBY et al. and BROCK et al. fail to teach the use of bicomponent fibers.

SAYOVITZ et al. discloses a process for producing bonded nonwoven fabrics. The reference teaches that the bonded regions cover from about 3% to about 50% of the surface of the nonwoven web. (Column 1, lines 5-45) The reference further teaches that the nonwoven webs of their invention are any known nonwoven webs that are amenable to pattern bonding, which include, but are not limited to, fiber webs fabricated from staple fibers, continuous fibers or mixtures thereof, and the fibers may be natural, synthetic or mixtures thereof. In addition, suitable fibers may be crimped or uncrimped, and synthetic fibers may be monocomponent fibers or multicomponent conjugate fibers, e.g. bicomponent side-by-side or sheath-core fibers. The reference further teaches the use of synthetic fibers produced from synthetic thermoplastic polymers such as polyethylene and polypropylene. (Column 3, lines 23-58).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven web and provide it with bicomponent fibers with the motivation of producing a nonwoven web that is amenable to pattern bonding and that will have useful properties such as surface abrasion resistance, web strength and dimensional stability as disclosed by SAYOVITZ et al. (Column 1, lines 63-67 through Column 2, lines 1-2).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 8:30-3:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nlt
March 20, 2003

ELIZABETH M. COLE
PRIMARY EXAMINER